



General

Title

Heart failure in adults: percentage of patients with heart failure diagnosis who were educated on the management of their condition.

Source(s)

Pinkerman C, Sander P, Breeding JE, Brink D, Curtis R, Hayes R, Ojha A, Pandita D, Raikar S, Setterlund L, Sule O, Turner A. Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 Jul. 94 p. [190 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients age 18 years and older with heart failure diagnosis who were educated on the management of their condition to include:

- Physical activity levels
- Proper diet
- Medications
- Daily weight monitoring
- What to do if their symptoms worsen

Rationale

The priority aim addressed by this measure is to increase the rate of heart failure patients age 18 years and older who have comprehensive patient education and follow-up care.

Heart failure is a major health problem in the United States (U.S.), and the incidence of the disease is increasing. The overall estimated 2004 prevalence of heart failure in adults age 20 and older in the U.S. was 5.2 million, with it being equally distributed among men and women.

Comprehensive education and counseling are essential for patients and caregivers to gain an understanding of the disease process and recommendations for disease management. The goals should focus on giving patients, family and caregivers the knowledge and self-care tools to effectively engage in treatment plans. Emphasis should be placed on understanding the definition and cause of the patient's heart failure, symptom recognition, medication usage and indications, risk factor modification, diet, activity and lifestyle recommendations, and the importance of treatment adherence.

The ability of a patient to understand the disease process and actively participate in heart failure management is linked to better outcomes. It is important for health care clinicians to assess health literacy and provide additional support, educational resources to enhance self-care and optimize heart failure treatment in those with low health literacy.

Evidence for Rationale

Driscoll A, Davidson P, Clark R, Huang N, Aho Z. Tailoring consumer resources to enhance self-care in chronic heart failure. *Aust Crit Care*. 2009 Aug;22(3):133-40. [37 references] [PubMed](#)

Evangelista LS, Rasmusson KD, Laramie AS, Barr J, Ammon SE, Dunbar S, Ziesche S, Patterson JH, Yancy CW. Health literacy and the patient with heart failure--implications for patient care and research: a consensus statement of the Heart Failure Society of America. *J Card Fail*. 2010 Jan;16(1):9-16. [60 references] [PubMed](#)

National Health and Nutrition Examination Survey 1999 to 2004 [NHANES] Data 1999-2004. [internet]. Hyattsville (MD): National Center for Health Statistics;

Pinkerman C, Sander P, Breeding JE, Brink D, Curtis R, Hayes R, Ojha A, Pandita D, Raikar S, Setterlund L, Sule O, Turner A. Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 Jul. 94 p. [190 references]

Roger VL, Weston SA, Redfield MM, Hellermann-Homan JP, Killian J, Yawn BP, Jacobsen SJ. Trends in heart failure incidence and survival in a community-based population. *JAMA*. 2004 Jul 21;292(3):344-50. [PubMed](#)

Primary Health Components

Heart failure; patient education

Denominator Description

Number of patients age 18 years and older with a diagnosis of heart failure (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of patients 18 years and older with a diagnosis of heart failure who were educated on the management of their condition to include:

Physical activity levels

Proper diet
Medications
Daily weight monitoring
What to do if their symptoms worsen

See the related "Numerator Inclusions/Exclusions" field.

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

- In age 20 to 39, the incidence of heart failure is 0.3% of the population in men and 0.2% of the population in women. In the ages 40s and 50s, the incidence is 2% in men and 1.5% in women. In the 60 to 79 age group, the incidence is 7.2% in men and 5.2% in women. However, once reaching age 80, the incidence of heart failure is higher in women, with 11.6% of men and 12.4% of women.
- Seventy-five percent of heart failure cases have antecedent hypertension in that the lifetime risk for heart failure doubles for people with blood pressure greater than 160/90 versus those with blood pressure less than 140/90. A community-based cohort study conducted in Olmsted County, Minnesota, showed that the incidence of heart failure (International Classification of Diseases, Ninth Revision [ICD9]-428) has not declined during the past two decades, but survival after onset has increased overall, with less improvement among women and elderly persons.

Evidence for Additional Information Supporting Need for the Measure

National Health and Nutrition Examination Survey 1999 to 2004 [NHANES] Data 1999-2004. [internet]. Hyattsville (MD): National Center for Health Statistics;

Pinkerman C, Sander P, Breeding JE, Brink D, Curtis R, Hayes R, Ojha A, Pandita D, Raikar S, Setterlund L, Sule O, Turner A. Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 Jul. 94 p. [190 references]

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Extent of Measure Testing

Unspecified

National Guideline Clearinghouse Link

[Heart failure in adults.](#)

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Person- and Family-centered Care

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Data Collection for the Measure

Case Finding Period

The time frame pertaining to data collection is monthly.

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of patients age 18 years and older with a diagnosis of heart failure*

Data Collection: Query electronic medical records (EMR) for clinic visits within the last 12 months for patients age 18 years and older with heart failure diagnosis.

*International Classification of Diseases, Ninth Revision (ICD-9) codes: 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.40, 428.41, 428.42, 428.43, 428.9. (Refer to the table "Descriptions of ICD-9 Codes" in the original measure documentation for code descriptions.)

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of patients 18 years and older with a diagnosis of heart failure who were educated on the management of their condition to include:

- Physical activity levels
- Proper diet
- Medications
- Daily weight monitoring
- What to do if their symptoms worsen

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Percentage of heart failure patients who have education on the following about their condition: physical activity levels, proper diet, medications, daily weight monitoring, what to do if their symptoms worsen.

Measure Collection Name

Heart Failure in Adults

Submitter

Institute for Clinical Systems Improvement - Nonprofit Organization

Developer

Institute for Clinical Systems Improvement - Nonprofit Organization

Funding Source(s)

The Institute for Clinical Systems Improvement's (ICSI's) work is funded by the annual dues of the member medical groups and five sponsoring health plans in Minnesota and Wisconsin.

Composition of the Group that Developed the Measure

Work Group Members: Charles Pinkerman, MD (*Work Group Leader*) (Park Nicollet Health Services) (Cardiology); Paul Sander, MD (*Work Group Leader*) (North Memorial Health Care) (Cardiology); Joshua E. Breeding, PharmD, BCPS (Fairview Health Services) (Pharmacist); Shama Raikar, MD (HealthPartners Medical Group and Regions Hospital) (Internal Medicine); Oghomwen Sule, MD (Howard Young Medical Center) (Internal Medicine); Ashok Ojha, MD (Hutchinson Medical Center) (Internal Medicine); Rochelle Curtis, PA (Park Nicollet Health Services) (Cardiology); Deepti Pandita, MD (Park Nicollet Health Services) (Internal Medicine); Angela Turner, PA-C (Park Nicollet Health Services) (Cardiology); Darin Brink, MD (University of Minnesota Physicians) (Family Medicine); Rochelle Hayes, BS (Institute for Clinical Systems Improvement) (Systems Improvement Coordinator); Linda Setterlund, MA, CPHQ (Institute for Clinical Systems Improvement) (Clinical Systems Improvement Facilitator)

Financial Disclosures/Other Potential Conflicts of Interest

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Where there are work group members with identified potential conflicts, these are disclosed and discussed at the initial work group meeting. These members are expected to recuse themselves from related discussions or authorship of related recommendations, as directed by the Conflict of Interest committee or requested by the work group.

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Disclosure of Potential Conflicts of Interest

Joshua E. Breeding, PharmD, BCPS (Work Group Member)

Pharmacy, Fairview Health Services

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: None

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Darin Brink, MD (Work Group Member)

Family Medicine, University of Minnesota Physicians

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: Colorectal Cancer Screening Guideline Work Group

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Rochelle Curtis, PA (Work Group Member)

Cardiology, Park Nicollet Health Services

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: None

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Ashok Ojha, MD (Work Group Member)

Internal Medicine, Hutchinson Medical Center

National, Regional, Local Committee Affiliations: Minneapolis Heart Institute

Guideline Related Activities: None

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Deepti Pandita, MD (Work Group Member)

Internal Medicine, Park Nicollet Health Services

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: Breast Cancer Treatment Guideline Work Group

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Charles Pinkerman, MD (Work Group Leader)

Cardiology, Park Nicollet Health Services

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: None

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Shama Raikar, MD (Work Group Member)

Internal Medicine, HealthPartners Medical Group and Regions Hospital

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: Chronic Obstructive Pulmonary Disease

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Paul Sander, MD (Work Group Leader)

Cardiology, North Memorial Health Care

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: None

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Oghomwen Sule, MD (Work Group Member)

Internal Medicine, Howard Young Medical Center

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: Diagnosis and Initial Treatment of Stroke

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Angela Turner, PA-C (Work Group Member)

Cardiology, Park Nicollet Health Services

National, Regional, Local Committee Affiliations: None

Guideline Related Activities: None

Research Grants: None

Financial/Non-Financial Conflicts of Interest: None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2013 Jul

Measure Maintenance

Scientific documents are revised every 12 to 24 months as indicated by changes in clinical practice and literature.

Date of Next Anticipated Revision

The next scheduled revision will occur within 24 months.

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in January 2016.

Measure Availability

Source available for purchase from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#)

. Also available to ICSI members for free at the [ICSI Web site](#)

and to Minnesota health care organizations free by request at the [ICSI Web site](#)

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For more information, contact ICSI at 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; Phone: 952-814-7060; Fax: 952-858-9675; Web site: www.icsi.org ; E-mail: icsi.info@icsi.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on October 14, 2013.

The information was reaffirmed by the measure developer on January 13, 2016.

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Production

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